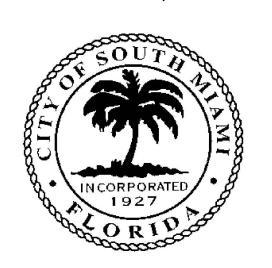
100% PHASE SUBMITTAL **SEPTEMBER 6, 2013**

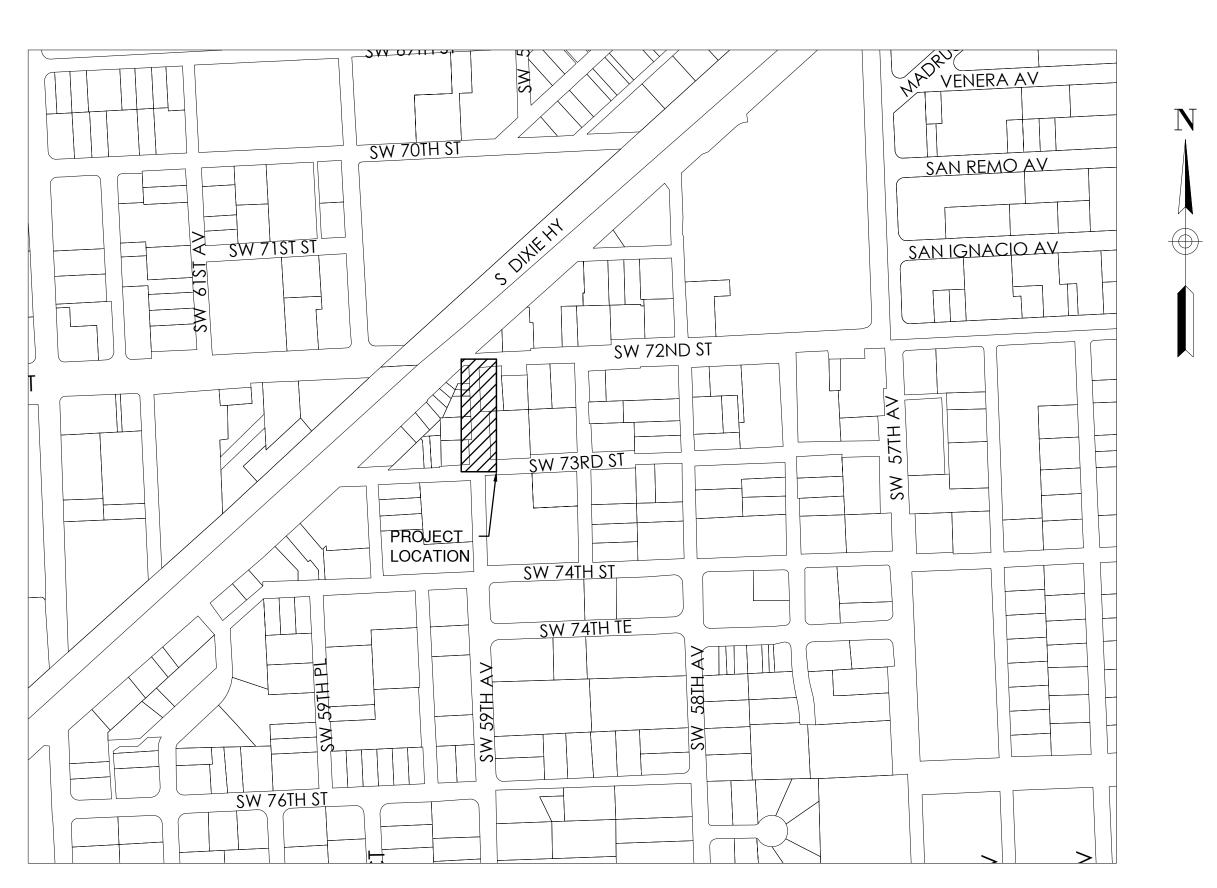
CITY OF SOUTH MIAMI PUBLIC WORKS & ENGINEERING DEPARTMENT

4795 SW 72 AVE, MIAMI, FL 33155



DORN AVE (SW 59 AVE) DRAINAGE IMPROVEMENTS FROM SW 73 ST TO SW 72 ST

PAVING, GRADING & DRAINAGE DETAILS



BEACH BROWARD COLLIER **CITY OF SOUTH MIAMI** MIAMI-MONROE **DADE Vicinity Map**

PALM

CITY OF SOUTH MIAMI COMMISSION

MAYOR **VICE MAYOR: COMMISSIONERS:**

BOB WELSH

JOSH LIEBMAN

CITY MANGER:

VALERIE NEWMAN WALTER A. HARRIS STEVE ALEXANDER

PHILIP K. STODDARD, PHD

PROJECT LOCATION MAP 1" = 300'

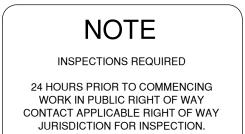






CA # 7011 815 NW 57 AVE, SUITE 402 MIAMI, FL 33126 (305) 265-5400





SAFETY IS PARAMOUNT FOR ALL CONSTRUCTION ACTIVITIES. APPLICABLE JURISDICTIONAL SAFETY REQUIREMENTS MUST BE ADHERED TO ALWAYS.

NOTE APPROVAL OF THESE PLANS DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION. A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM JURIDICTIONAL AUTHORITIES.

RODNEY C. DEVERA, P.E.

FL LICENSE NO. 71348

- 2. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF/HERSELF WITH PROJECT SITE & TO DETERMINE TOPOGRAPHIC OR UNDERGROUND FEATURES THAT WILL BE IMPACTED DUE TO HIS/HER PROPOSED METHOD OF CONSTRUCTION. THE CONTRACTOR MUST INCLUDE IN HIS BID PRICE, THE COST OF RELOCATING OR REPLACING IN KIND ANY FEATURES THAT WILL BE IMPACTED DUE TO HIS/HER PROPOSED METHOD OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO EXISTING TREES, UTILITY BOXES, SIGNS, FIRE HYDRANTS, GUARDRAILS, UTILITY POLES, VALVES, ETC. NO ADDITIONAL COMPENSATION WILL BE CONSIDERED BY THE CITY IN THE EVENT THE CONTRACTOR NEGLECTS TO ACCOUNT FOR THIS WORK IN HIS/HER BID PRICE.
- 3. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING TREES, STRUCTURES, & UTILITIES WHICH MAY OR MAY NOT BE SHOWN ON THE PLANS. ANY EXISTING STRUCTURE, PAVEMENT, TREES OR OTHER EXISTING UTILITIES NOT SPECIFIED FOR REMOVAL WHICH IS DAMAGED, EXPOSED OR IN ANY WAY DISTURBED BY CONSTRUCTION PERFORMED, SHALL BE REPAIRED, PATCHED OR REPLACED AT NO ADDITIONAL COST TO THE CITY.
- 4. THE LOCATION & SIZE OF ALL EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS &/OR BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES PRIOR TO BEGINNING ANY CONSTRUCTION OPERATION. ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS MUST BE RESOLVED BY THE ENGINEER & THE CITY. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT & NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF/HERSELF WITH CURRENT SITE CONDITIONS & SHALL REPORT ANY DISCREPANCIES TO THE CITY & ENGINEER (EOR) PRIOR TO STARTING WORK.
- 6. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE ADEQUATE MEASURES TO ENSURE SAFETY WHEN WORKING WITHIN THE VICINITY OF OVERHEAD ELECTRICAL, TELEPHONE & OTHER LINES. PROPER COORDINATION WITH JURISDICTIONAL AUTHORITIES MUST BE UNDERTAKEN AS APPLICABLE.
- 7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES OPEN, UNCOVERED OR EXPOSED AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES WHEN THE CONTRACTOR IS NOT WORKING.
- 8. THE CONTRACTOR SHALL KEEP THE SITE REASONABLY FREE FROM DEBRIS, TRASH, & CONSTRUCTION WASTE. BUILDING MATERIAL &/OR CONSTRUCTION DEBRIS STORED ADJACENT TO OR UPON THE ROADWAY SHALL BE ADEQUATELY MARKED AT ALL TIMES FOR PEDESTRIAN & TRAFFIC SAFETY.
- 9. CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL 811 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION/DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES.
- 10. CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS &/OR APPROVALS PRIOR TO THE START OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO AN NPDES NOI PERMIT & ANY OTHER PERMIT ASSOCIATED WITH SUCH PERMIT.
- 11. ANY DEWATERING OPERATIONS REQUIRED FOR CONSTRUCTION MUST BE APPROVED &/OR PERMITTED
- 12. ALL LANDSCAPED/OPEN AREAS, SIDEWALKS, PAVEMENTS & OTHER AREAS IMPACTED BY CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER.
- 13. IN THE EVENT CONTAMINATED MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY ADVISE THE CITY, E.O.R & RER.
- 14. ANY MATERIAL REMOVED FROM THIS PROJECT SHALL BE DISPOSED OF PROPERLY BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE CITY.
- 15. THE CONTRACTOR SHALL PREPARE & SUBMIT SHOP DRAWINGS FOR ALL ITEMS LISTED IN PROJECT
- 16. WHERE NEW PAVEMENT MEETS EXISTING, CONNECTION SHALL BE MADE IN A NEAT STRAIGHT LINE &
- 17. THE CONTRACTOR MUST INCLUDE AS PART OF HIS BID THE COST OF RESTORING A FULL LANE OR LANES OF ROADWAY THAT ARE AFFECTED BY CONSTRUCTION. THIS SHOULD INCLUDE ALL TRENCH RESTORATION & RESURFACING AS TO ENSURE THAT THE ROADWAY IS FULLY RESTORED TO EQUAL OR BETTER CONDITION.
- 18. ALL ELEVATIONS ON THE PLAN & PROFILE SHEETS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929. BENCHMARKS USED ARE THOSE IDENTIFIED ON THE TOPOGRAPHIC BOUNDARY SURVEY.
- 19. THE TOPOGRAPHY SURVEY WAS PREPARED BY LONGITUDE SURVEYORS LLC; EDUARDO M. SUAREZ, PSM (LS 6313) DATED AUGUST 30, 2013.
- 20. SURVEY MONUMENTS WITHIN THE LIMITS OF THE PROJECT ARE TO BE PROTECTED.

SPECIFICATIONS.

FLUSH WITH EXISTING PAVEMENT.

- 21. THE CONTRACTOR MUST COMPLY WITH ALL HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS AS STATED IN THE FLORIDA ADMINISTRATIVE CODE (F.A.C.) RULE 62-555.314.
- 22. THE CONTRACTOR MUST ENSURE THAT PRECISE RECORDS ARE TAKEN PRIOR TO BACKFILLING OVER UTILITIES. AS-BUILTS MUST CONFORM TO APPLICABLE STANDARDS & REQUIREMENTS STIPULATED BY THE CITY.

MAINTENANCE OF TRAFFIC

- 23. THE CONTRACTOR MUST PRODUCE HIS/HER OWN MOT PLANS & MUST HAVE SAID PLANS APPROVED BY CITY. THE PLAN MUST CONFORM TO THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FLORIDA D.O.T. DESIGN STANDARDS, THE SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE COST ASSOCIATED WITH THIS EFFORT MUST BE REFLECTED IN THE BID. NO ADDITIONAL COMPENSATION WILL BE GRANTED BY THE CITY FOR MOT COSTS ASSOCIATED WITH THIS PROJECT AFTER PROJECT AWARD. MOT PLANS SHALL INCLUDE BUT NOT LIMITED TO MESSAGE BOARDS TO INFORM DRIVERS OF CONSTRUCTION ON ROADWAY, ADDRESSING SCHOOL ZONES & MAINTAINING CROSSING ACCESS, ETC.
- 24. THE CONTRACTOR SHALL SUBMIT THE MAINTENANCE OF TRAFFIC PLAN (MOT) TO THE CITY FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION. THE CONDITIONS OUTLINED IN THE MOT ARE ENFORCED & FULLY EFFECTIVE AS PART OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH ALL THE REQUIREMENTS OF THE APPROVED MOT.
- 25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE POLICE, FIRE DEPARTMENT & ALL OTHER AGENCIES OF THE PROPOSED LANE CLOSURES OR TEMPORARY DETOURS.
- 26. THE TRAFFIC & TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR & MATERIAL ARE AVAILABLE FOR THE CONSTRUCTION IN THAT AREA.
- 27. THE CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL WORK ZONE. WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE THE SIGNS OR PAVEMENT MARKINGS TO THEIR ORIGINAL AND NEW CONDITION. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY ANY METHOD THAT WILL NOT MATERIALLY DAMAGE THE SURFACE TEXTURE OF THE PAVEMENT & WHICH WILL ELIMINATE THE PREVIOUS MARKING PATTERN OF WEATHER AND LIGHT CONDITIONS. USE OF BLACK PAINT TO COVER EXISTING PAVEMENT MARKINGS SHALL BE PROHIBITED.
- 28. ADDITIONAL BARRICADES, SIGNING, LIGHTING, OR OTHER TRAFFIC CONTROLS, AS REQUIRED BY STATE AND LOCAL JURISDICTION STANDARDS, SHALL BE PROVIDED AS CONDITIONS WARRANT.
- 29. PROPOSED CONSTRUCTION WORK MUST BE PROPERLY COORDINATED TO ENSURE THAT THERE ARE NO ADVERSE IMPACTS TO SURROUNDING TRAFFIC OPERATIONS AND ACCESS.
- 30. CONTRACTOR SHALL INSTALL CONSTRUCTION SIGNS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND MAINTAIN THEM DURING ALL PHASES OF CONSTRUCTION.

PRE-TRENCHING

- 31. UTILITIES SHOWN ON THESE PLANS SHEETS ARE APPROXIMATE & ADDITIONAL UTILITIES MAY EXIST IN THE FIELD THAT IS NOT SHOWN ON THE PLANS. THE CONTRACTOR MUST INCLUDE AS PART OF HIS/HER BID, AN ITEM FOR PRE-TRENCHING TO ENSURE THAT NO PORTION OF THE PROPOSED WORK CONFLICTS WITH ANY UTILITIES, PRIOR TO CONSTRUCTION. IF POTENTIAL CONFLICTS ARE FOUND, THEN THE CONTRACTOR MUST NOTIFY THE OWNER, ENGINEER & UTILITY OWNER AT LEAST SEVEN (7) DAYS ADVANCED NOTICE PRIOR TO CONSTRUCTION. THIS NOTIFICATION SHALL INCLUDE SURVEY INFORMATION ABOUT THE CONFLICTING UTILITY'S HORIZONTAL & VERTICAL ALIGNMENT. FAILURE ON THE CONTRACTOR'S PART TO PRE-TRENCH PRIOR TO CONSTRUCTION IS AT HIS/HER OWN RISK & BY SO DOING RELIEVES THE CITY & THE ENGINEER OF ANY & ALL LIABILITIES & COSTS ASSOCIATED WITH RESOLVING UTILITY CONFLICTS. IN ADDITION. NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR ANY COSTS INCURRED AS A RESULT OF FAILURE ON THE CONTRACTOR'S PART TO PRE-TRENCH.
- 32. EXTREME CAUTION MUST BE USED DURING ANY EXCAVATION. ALL EXCAVATIONS MUST BE SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED.
- 33. CONTRACTOR MUST UTILIZE SUBSURFACE UTILITY ENGINEERING METHODS & CORING TO DISCLOSE THE PRESENCE OF ROCK, UTILITIES & OTHER SUBSURFACE ELEMENTS NOT INDICATED ON TOPOGRAPHY SURVEY.
- 34. CONTRACTOR MUST ENGAGE IN CONSULTATIONS WITH IDENTIFIED UTILITY OWNERS.
- 35. PRE-TRENCHING DIRECTIONS TO CONTRACTOR:
- A. CONTRACTOR MUST UTILIZE A SUPPORT SYSTEM STURDY ENOUGH TO WITHSTAND THE PRESSURE
- B. CONTRACTOR MUST UTILIZE A SUPPORT SYSTEM STURDY ENOUGH TO WITHSTAND THE STRESS WHICH MAY BE EXERTED BY WATER, VIBRATION, OR HEAVY LOADS.
- C. CONTRACTOR MUST PROPERLY SUPPORT ANY UNDERGROUND INSTALLATIONS THAT ARE UNCOVERED.
- D. CONFORM TO FLORIDA'S TRENCH SAFETY ACT & OSHA REQUIREMENTS
- 36. BEFORE TRENCHING OR EXCAVATION, CONTRACTOR MUST CHECK THE FOLLOWING:
- A. SOIL CONDITIONS OR OTHER MATERIAL TO BE DUE.
- B. PROXIMITY TO UTILITIES, BUILDINGS & SOURCES OF VIBRATIONS.
- C. OWNERS OF UTILITIES, SERVICE, OR TRANSMISSION PIPING, ETC. & ARRANGE FOR SHUTDOWN OR RELOCATION OF FACILITIES, IF NECESSARY.
- D. FOR PREVIOUSLY DISTRIBUTED GROUND.
- E. FOR TREES, BOULDERS, OR OTHER HAZARDS.
- F. ADEQUACY & AVAILABILITY OF ALL EQUIPMENT, INCLUDING PERSONAL PROTECTIVE GEAR, SHORING MATERIALS, SIGNS, BARRICADES & MACHINERY.
- 37. DURING TRENCHING OR EXCAVATION, CONTRACTOR MUST REGULARLY CHECK FOR THE FOLLOWING: A. CHANGING GROUND CONDITIONS PARTICULARLY AFTER RAINFALL.
- B. POSSIBLE OXYGEN DEFICIENCY OR GASEOUS CONDITIONS.
- C. ADEQUACY OF SHORING AND/OR SLOPING AS WORK PROGRESSES.
- D. MAINTENANCE OF ENTRANCE & EXIT FACILITIES.
- E. ALL SHEETING, BRACING, SHORING & UNDERPINNING.
- F. CHANGES IN VEHICULAR & MACHINERY OPERATIONAL PATTERNS

- 38. AFTER TRENCHING OR EXCAVATION, THE CONTRACTOR MUST CHECK FOR:
- Q. DEPTH OF TRENCHING OR EXCAVATION, ITS SLOPING & SHORING.
- A. SLOPING OF BANKS, SIDES & WALLS IN RELATION TO DEPTH OF CUT, WATER CONTENT OF SOIL,
- B. ENTRANCE & EXIT FACILITIES.
- C. LOCATION OF HEAVY EQUIPMENT POWER SHOVELS, DERRICK, TRUCKS.
- D. EXCAVATION MATERIAL IS TWO FEET OR MORE FROM EDGE OF OPENING.
- E. PORTABLE TRENCH BOXES OR TRENCH SHIELDS ARE ADEQUATE, IF USED.
- F. CROSS BRACES OR TRENCH JACKS ARE CORRECTLY POSITIONED TO PREVENT SLIDING, FALLING OR KICKOUTS.

39. PRE-TRENCHING REQUIREMENTS CHECKLIST:

- A. PRIOR TO EXCAVATION, THE CONTRACTOR MUST UNDERTAKE EFFORTS TO DETERMINE UNDERGROUND INSTALLATIONS SUCH AS SEWER, TELEPHONE, WATER, GAS, ELECTRIC LINES, ETC. ARE PRESENT & WHERE THEY ARE ACTUALLY LOCATED.
- B. THE WALLS & FACES OF ALL EXCAVATIONS IN WHICH EMPLOYEES ARE EXPOSED TO DANGER FROM MOVING GROUND SHALL BE GUARDED BY A SHORING SYSTEM, SLOPING OF THE GROUND OR SOME OTHER EQUIVALENT MEANS.
- C. THE DETERMINATION OF THE ANGLE OF REPOSE & DESIGN OF THE SUPPORTING SYSTEM SHALL BE BASED ON CAREFUL EVALUATION OF PERTINENT FACTORS SUCH AS: DEPTH OF CUT, POSSIBLE VARIATION IN THE WATER CONTENT OF THE MATERIALS FROM EXPOSURE TO AIR, SUN AND/OR
- D. ALL SLOPES SHALL BE EXCAVATED TO AT LEAST THE ANGLE OF REPOSE EXCEPT IN AREAS WHERE SOLID ROCK ALLOWS FOR LINE DRILLING OR PRESPLITTING.
- E. IN EXCAVATIONS WHICH EMPLOYEES MAY BE REQUIRED TO ENTER, EXCAVATED OR OTHER MATERIALS SHALL BE EFFECTIVELY STORED & RETAINED AT LEAST 2 FT OR MORE FROM THE EDGE OF THE EXCAVATION.

APPLICABLE CODES & STANDARD SPECIFICATIONS

- CITY OF SOUTH MIAMI PUBLIC WORKS & ENGINEERING DEPARTMENT.
- 2. MIAMI-DADE PUBLIC WORKS DEPARTMENT (MDPWD)
- 3. MIAMI-DADE DEPARTMENT OF REGULATORY & ECONOMIC RESOURCES (RER).
- 4. FLORIDA ADMINISTRATIVE CODE (FAC).
- 5. FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) 2014 EDITION.
- 6. FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). 7. AMERICANS WITH DISABILITIES ACT & ACCESSIBILITY GUIDELINES (ADA).
- 8. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA).

ABBREVIATIONS

ABD	ABANDONED	LP	LIGHT POLE
AC	ASBESTOS CEMENT	LT	LEFT
ADA	AMERICAN WITH DISABILITIES ACT	MAX	MAXIMUM
ADJ	ADJUST	MHW	MEAN HIGH WATER
APPROX	APPROXIMATELY	MIN	MINIMUM
ASPH	ASPHALT	MISC	MISCELLANEOUS
AVE	AVENUE	MOT	MAINTENANCE OF TRAFFIC
BE	BURIED ELECTRIC	MPH	MILES PER HOUR
₽ <u> </u>	BASE LINE	MUTCD	MANUAL ON UNIFORM TRAFFIC
BLDG	BUILDING		CONTROL DEVICES
BLVD	BOULEVARD	N	NORTH
BM	BENCH MARK	NAVD	NATIONAL AMERICAN VERTICAL DATUM
BOS	BACK OF SIDEWALK	NGVD	NATIONAL GEODETIC VERTICAL DATUM
ВОТ	BOTTOM	NO	NUMBER
BT	BURIED TELEPHONE	NTS	NOT TO SCALE
C&G	CURB & GUTTER	OC	ON CENTER
C.L.F.	CHAIN LINK FENCE	OFF	OFFSET
CB	CATCH BASIN	OT	OVERHEAD TELEPHONE
CF	CUBIC FOOT	OU	OVERHEAD UTILITY
CFS	CUBIT FEET PER SECOND	PE	PROFESSIONAL ENGINEER
CI	CAST IRON	 P_	PROPERTY LINE
CIP	CAST IRON PIPE	PLA	PLASTIC
င ်	CENTER LINE	PP	POWER POLE
CMP	CORRUGATED METAL PIPE	PRB	POLLUTION RETARDANT BAFFLE
CO	CLEAN OUT	PROP	PROPOSED
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CONST	CONSTRUCTION	PVMT	PAVEMENT
CY	CUBIC YARD	R	RADIUS
DBL	DOUBLE	RCP	REINFORCED CONCRETE PIPE
DEPT	DEPARTMENT	RD	ROAD
DIA	DIAMETER	REF	REFERENCE
DIP	DUCTILE IRON PIPE	REQ	REQUIRE
DRWY	DRIVEWAY		RIGHT OF WAY
DWG(S)	DRAWING(S)	RPM	RAISED REFLECTIVE PAVEMENT
E (8)	EAST	1 (1 14)	MARKER
EA	EACH	RT	RIGHT
EL	ELEVATION	S	SOUTH
EOP	EDGE OF PAVEMENT	S/W	SIDEWALK
EOR	ENGINEER OF RECORD	SD	STORM DRAIN
EXIST	EXISTING	SP	SAMPLING POINT
F&I	FURNISH & INSTALL	SPEC	SPECIFICATION
F.A.C.	FLORIDA ADMINISTRATIVE CODE	SS	SANITARY SEWER
F.F.E.	FINISH FLOOR ELEVATION	ST	STREET
FD	FRENCH DRAIN	STA	STATION
FH	FIRE HYDRANT	STD	STANDARD
FM	FORCE MAIN	SYMB	SYMBOL
FOC	FIBER OPTICS CABLE	TAP SL	TAPPING SLEEVE
FT	FEET	TAP V	TAPPING VALVE
G	GAS	TB	TEST BORING
GALV	GALVANIZED	TERR	TERRACE
GALV	GRADE BREAK	TH	TEST HOLE
GM	GAS MAIN	TOC	TOP OF CURB
GP	GRADE POINT	TOS	TOP OF SIDEWALK
GRD	GROUND	TYP	TYPICAL
GV	GATE VALVE	UG	UNDERGROUND
HC	HORIZONTAL CLEARANCE	VERT	VERTICAL
HH	HAND HOLE	VERI	VITRIFIED CLAY PIPE
HORIZ	HAND HOLE HORIZONTAL	W	WEST
HORIZ IN		W/	WITH
INV	INCHES INVERT	W/O	WITHOUT
		W/O W/STL	WRAP STEEL
L	LENGTH LIME ROCK BEARING RATIO		WAAP STEEL WATER LINE
LBR		WL WA	
LF	LINEAR FOOT	WM	WATER MAIN



CITY OF SOUTH MIAMI 4756 SW 75th AVE MIAMI, FL 33155 www.broward.edu

CONSULTANT:



MIAMI, FL 33126

PH: 305-265-5400 FAX: 305-264-5507

SUB-CONSULTANT:



PROJECT:

DORN AVENUE DRAINAGE IMPROVEMENTS

LOCATION MAP:

REVISIONS: DESCRIPTION DATE B DATE ISSUED: SEPTEMBER 6, 2013 DESIGNED BY: RD

DRAWN BY: ER REVIEWED BY: ML

RODNEY C. DEVERA, P.E. FL LICENSE No. 71384

SHEET TITLE:

GENERAL NOTES

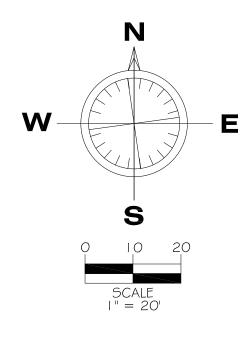
SHEET NO.

100% CONSTRUCTION DOCUMENT

SHEET 2 OF 8

MAPOFTOPOGRAPHICSURVEY

OF A PORTION OF THE PUBLIC RIGHT-OF-WAY OF S.W. 59TH AVENUE, BETWEEN S.W. 72ND STREET (SUNSET DRIVE) AND S.W. 73RD STREET, ALL LYING AND BEING IN THE CITY OF SOUTH MIAMI, MIAMI-DADE COUNTY, FLORIDA



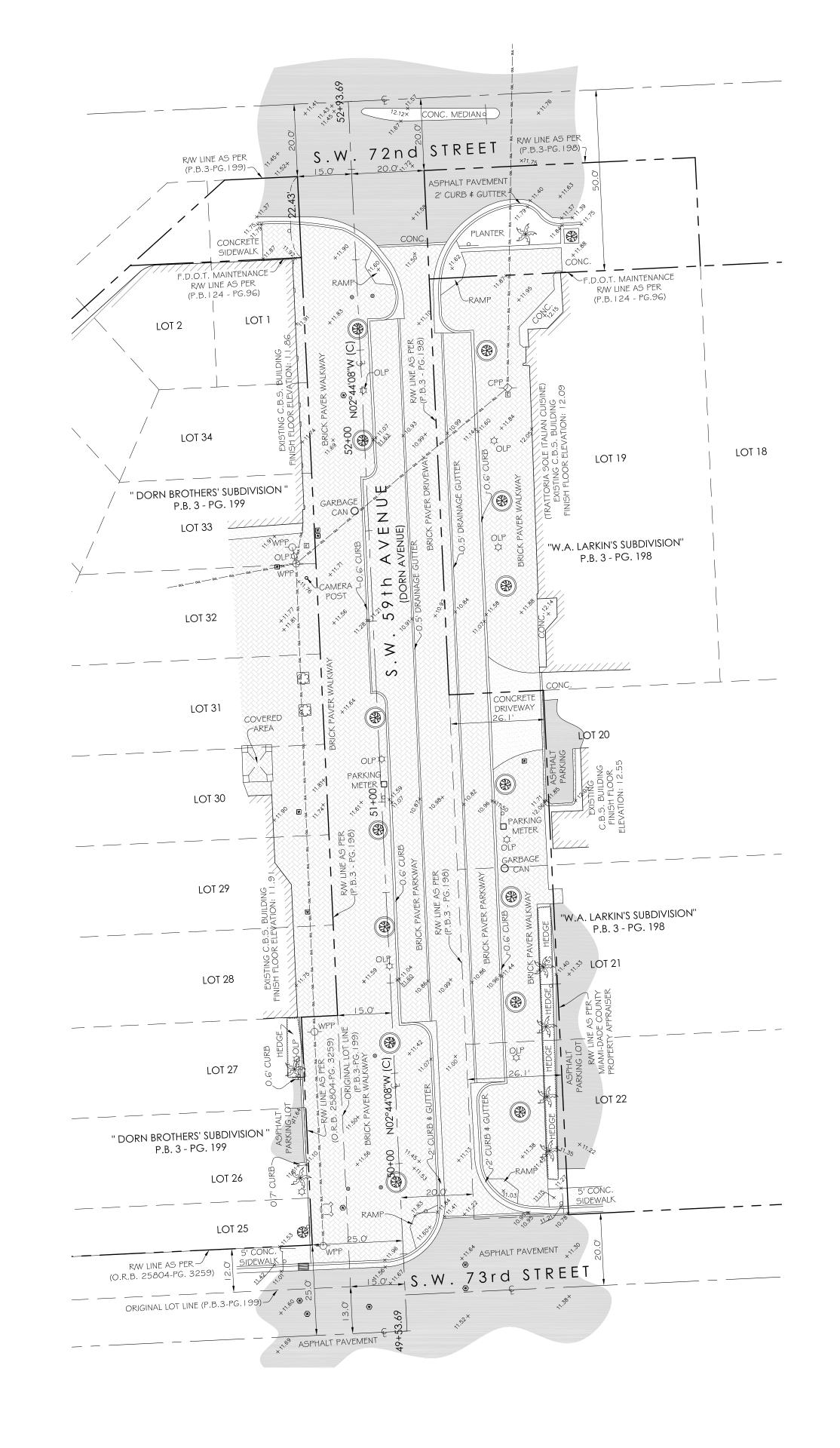
LEGEND CONC. = CONCRETE = TEMPORARY SITE BENCHMARK = CALCULATED = ELECTRIC BOX C.B.S. = CONCRETE BLOCK STUCCO W.F. = WOOD FENCE = SANITARY SEWER MANHOLE = CENTERLINE = ORNAMENTAL LIGHT POLE P.B. = PLAT BOOK = PALM TREE = PAGE C.L.F. = CHAIN LINK FENCE = TREE -O-= WOOD POWER POLE --- OUL --- = OVERHEAD WIRE = CHAIN LINK FENCE --- = METAL FENCE \longrightarrow = GUY ANCHOR = WOODEN UTILITY POLE = METAL FENCE = CATCH BASIN = CONCRETE UTILITY POLE = WATER VALVE = STORM DRAINAGE MANHOLE = WATER METER = BOLLARD = SEWER VALVE = ELEVATION = FIRE HYDRANT



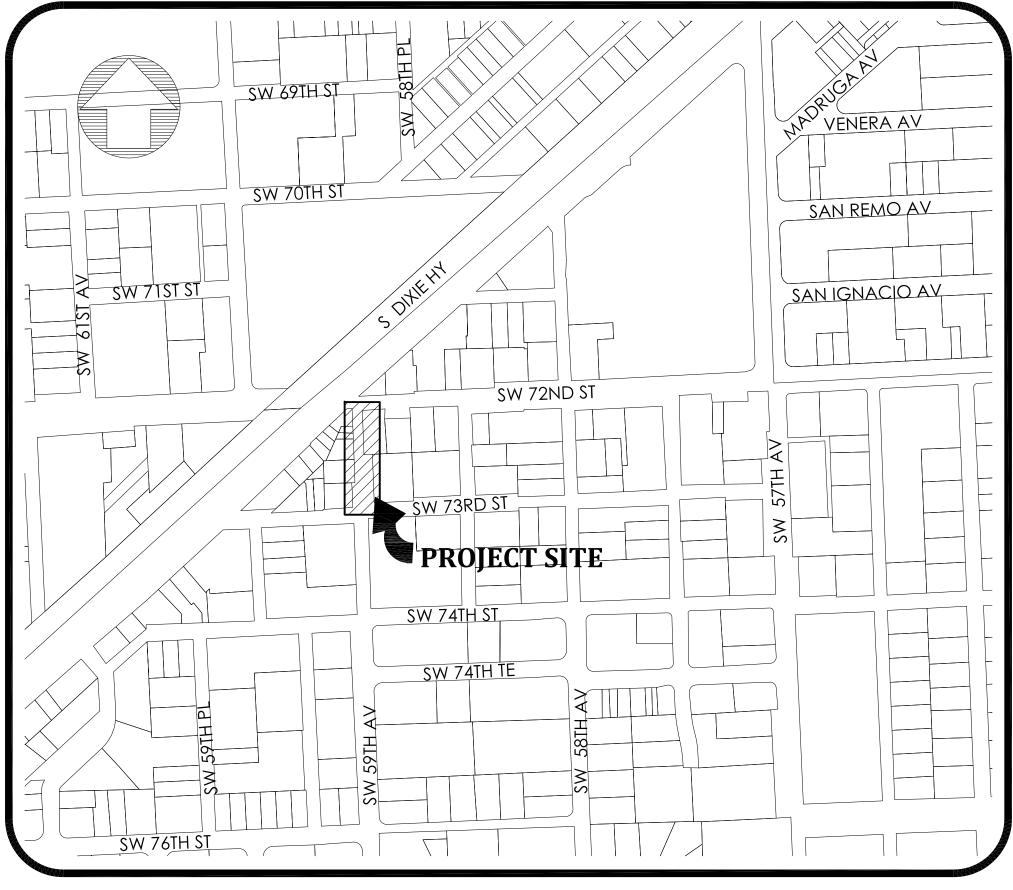
3900 N.W. 79TH AVENUE, SUITE 601 DORAL, FLORIDA 33166 PHONE:(305)463-0912 FAX:(305)513-5680 WWW.LONGITUDESURVEYORS.COM

JOB NO.: 13308 FIELD BOOK: EFB

DRAWN BY: DR SHEET 1 OF 1



SECTION 30 - TOWNSHIP 54 SOUTH - RANGE 40 EAST LYING IN THE CITY OF SOUTH MIAMI, MIAMI-DADE COUNTY, FLORIDA



LOCATION MAP

SCALE: 1" = 300'

SURVEYOR'S NOTES:

DATE OF FIELD SURVEY:

The date of completion of field Survey was on August 12, 2013.

The date of completion of the drawing was on August 30, 2013.

GENERAL AREA DESCRIPTION:

A portion of the following Public Right-of-Way; of S.W. 59th Avenue, between S.W. 72nd Street (Sunset Drive) and S.W. 73rd Street, all lying and being in the City of South Miami, Miami-Dade County, Florida.

ACCURACY:

The accuracy obtained by field measurement methods and office calculations of closed geometric figures meets and exceeds the Minimum Technical Standards requirement for Suburban Area (Linear: 1 foot in 7,500 feet) as defined in Rule 5J-17.051, Florida Administrative Code.

Elevations of well identified features as depicted on the Survey Map were measured to an estimated vertical position accuracy of 1/100 of a foot on hard surfaces and 1/10 of a foot on ground surfaces.

Well identified features as depicted on the Survey Map were measured to an estimated horizontal position accuracy of 1/10 of a foot.

This Map of Survey is intended to be displayed at a scale of One inch equals Twenty feet or smaller.

North arrow direction is based on an assumed Meridian.

Bearings as shown hereon are based upon the Centerline of S.W. 59th Avenue with an assumed bearing of N02°44'08"W, said line to be considered a well established and monumented line.

This property appears to be located in a Flood Zone "X" with the Base Flood Elevation being Not Determined, as per Federal Emergency Management Agency (FEMA) Community-Panel Number 120658 (City of South Miami), Map No. 0458, Suffix L, Map Revised Date: September 11, 2009.

For Vertical Control:

All elevations shown hereon are based on the National Geodetic Vertical Datum of 1929 (N.G.V.D.29), and a Benchmarks supplied by the Public Works Department of the Miami-Dade County, Florida.

Benchmark: South Miami Elevation: 13.30 Located at the Southwest corner of the intersection of S.W. 59th Avenue and S.W. 72nd Street.

For Horizontal Control:

All coordinates (Northing and Easting) are relative to the Florida State Plane Coordinates, Florida East Zone, North American Datum (NAD) 1983 adjustment of National Geodetic Survey-CORS 1996 (NAD83/CORS96). Global Positioning System (G.P.S.). measurements were conducted in the field to acquire said coordinate values which are based on the following Horizontal Control Station:

The following Horizontal Data was obtained from the Florida Permanent Network Web Site (a Florida Reference Station Service Provider, www.myfloridagps.com).

Florida Permanent Network Control Stations:

Name: MIAMI 6 (MIAM) Code: MIAM Geographic Coordinates: Latitude: 25°43'57.85257" N Longitude: 80°09'47.5065" W State Plane Coordinates: Northing: 509,427.49 US Feet Easting: 931,640.11 US Feet Creation Date: 08-02-2010 Receiver Type: TRIMBLE NETRS Satellite System: GPS Only Coverage Radius: 30 km

Name: MIAMI 3 (RICHMOND) Code: RMND Geographic Coordinates: Latitude: 25°36′ 49.58922″ N Longitude: 80°23' 02.14116" W State Plane Coordinates: Northing: 465,790.41 US Feet Easting: 859,175.16 US Feet Creation Date: 08-02-2010 Receiver Type: LEICA GRX1200PRO Satellite System: GPS Only

Coverage Radius: 30 km

SOURCES OF DATA: (CONTINUED):

Plat of "DORN BROTHERS' SUBDIVISION" recorded in Plat Book 3 at Page 199 of the Public Records of Miami-Dade County, Florida.

Plat of "W.A. LARKINS SUBDIVISION" recorded in Plat Book 3 at Page 198 of the Public Records of Miami-Dade County, Florida.

Florida Department of Transportation Right-of-Way Map recorded in Plat Book 124 at Page 96 of the Public Records of Miami-Dade County, Florida.

Miami-Dade County Department of Public Works Right-of-Way Division Section Sheet Map of Section 30, Township 54 South, Range 40 East.

LIMITATIONS:

Since no other information were furnished other than that is cited in the Sources of Data, the Client is hereby advised that there may be legal restrictions on the Subject Property that are not shown on the Survey Map that may be found in the Survey Department of the City of

The Surveyor makes no representation as to ownership or possession of the Subject Property by any entity or individual who may appear of Public Records of this County.

No excavation or determination was made as to how the Subject Property is served by

No improvements were located, other than those shown. No underground foundations, improvements and/or utilities were located or shown hereon.

PURPOSE OF SURVEY:

The purpose of this survey is for design.

CLIENT INFORMATION:

This Topographic Survey was prepared at the insistence of and certified to:

EAC Consulting Inc.

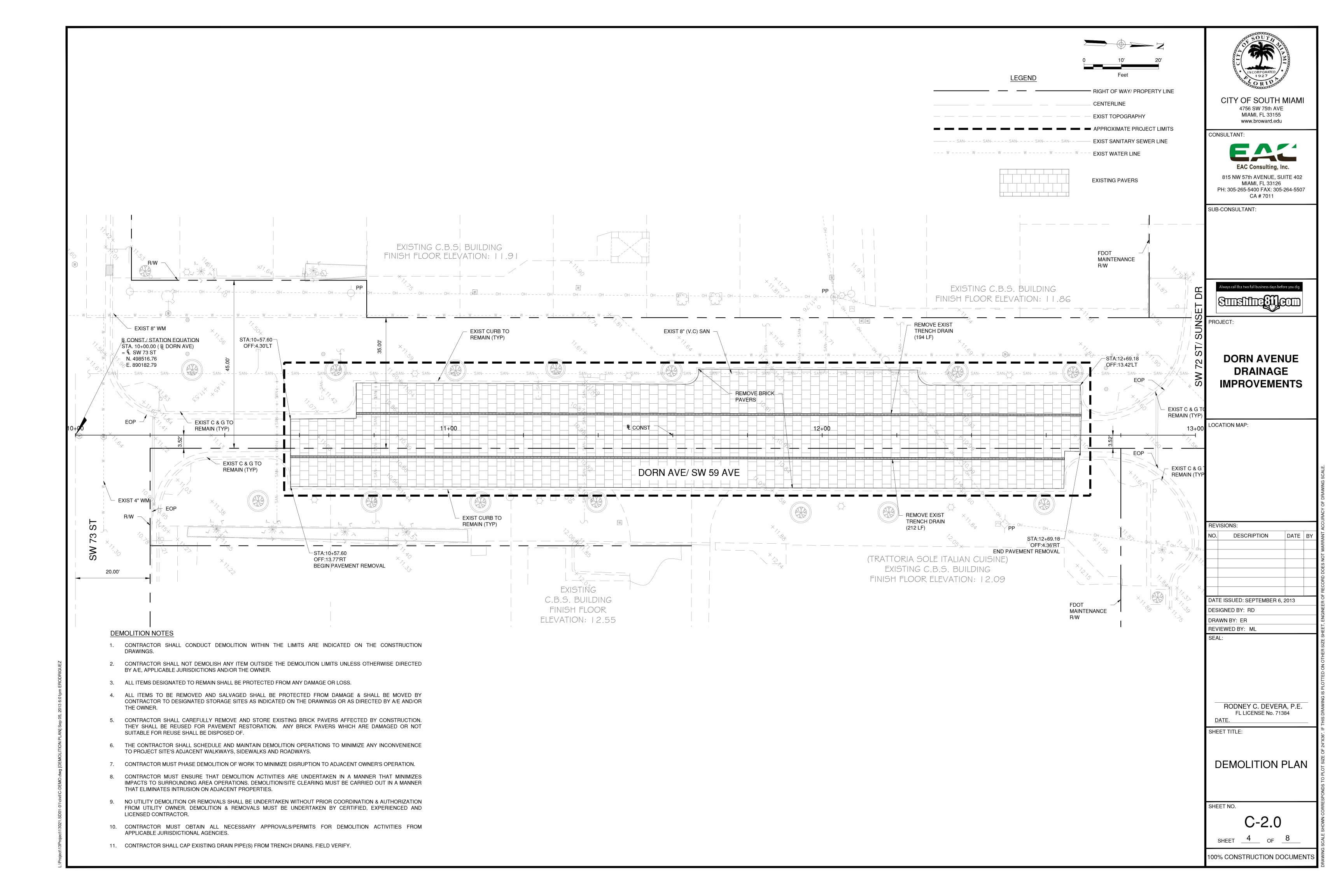
SURVEYOR'S CERTIFICATE:

I hereby certify: That this "Topographic Survey" and the Survey Map resulting therefrom was performed under my direction and is true and correct to the best of my knowledge and belief and further, that said "Topographic Survey" meets the intent of the applicable provisions of the "Minimum Technical Standards for Land Surveying in the State of Florida", pursuant to Rule 5J-17.051 through 5J-17.052 of the Florida Administrative Code and its implementing law, Chapter 472.027 of the Florida Statutes.

LONGITUDE SURVEYORS LLC., a Florida Corporation Florida Certificate of Authorization Number LB7335

Eduardo M. Suarez, PSM Registered Surveyor and Mapper LS6313 State of Florida

NOTICE: Not valid without the signature and original raised seal of a Florida Licensed Surveyor and Mapper. Additions or deletions to Survey Maps by other than the signing party are prohibited without the written consent of the signing party.



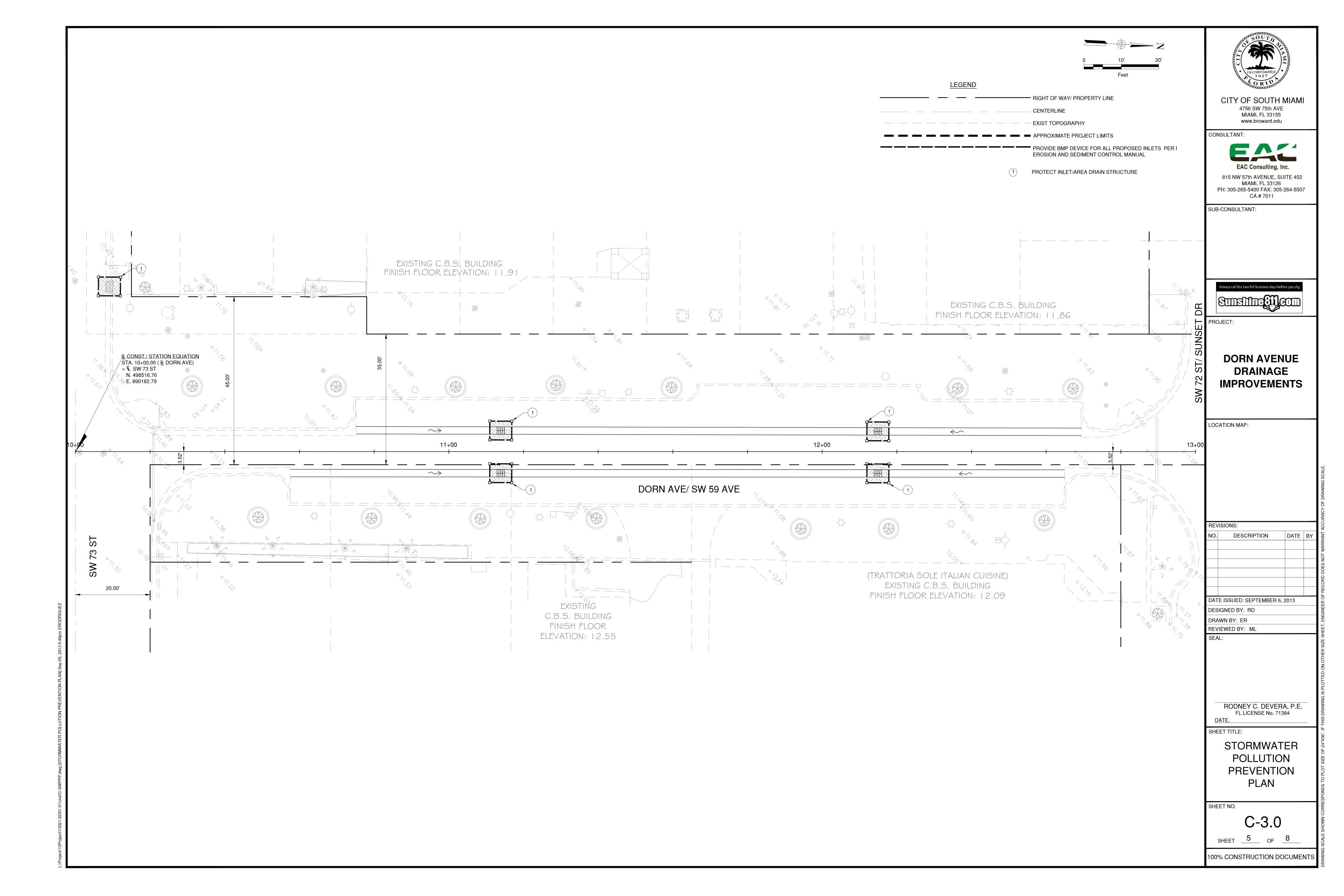


Figure V-51: Illustration of an Inlet Insert Sediment Containment System

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V-29

STATE OF FLORIDA EROSION & SEDIMENT CONTROL - DESIGNER & REVIEWER MANUAL

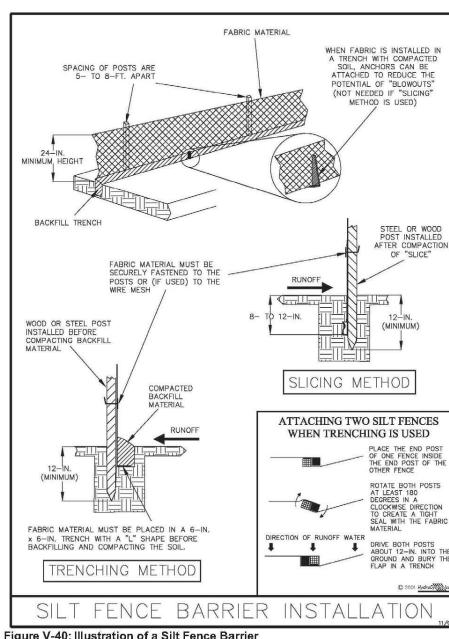


Figure V-40: Illustration of a Silt Fence Barrier

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STORM WATER POLLUTION PREVENTION PLAN NOTES

- 1. PERMANENT OR TEMPORARY EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICABLE TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICE. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF TEMPORARY EROSION & SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT, THE INITIAL WORK AREA, & OTHER AFFECTED AREAS TO PREVENT STORM WATER POLLUTION.
- 2. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE & REPAIRS OF EROSION & SEDIMENT CONTROL/SWPPP DEVICES PER THE FDOT STANDARD SPECIFICATION FOR ROAD & BRIDGE CONSTRUCTION (CURRENT EDITION). THE MAINTENANCE OF THESE DEVICES WILL OCCUR UNTIL THE OWNER'S REPRESENTATIVE HAD DEEMED AN AREA PERMANENTLY STABILIZED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL TEMPORARY EROSION AFTER COMPLETION OF THE PROJECT.
- 3. CONFORMANCE WITH SWPPP DOES NOT RELIEVE THE CONTRACTOR FORM HIS/HER RESPONSIBILITIES TO PROTECT ADJACENT PROPERTIES, FEATURES & NATURAL ENVIRONMENT FROM THE POSSIBLE DAMAGE IMPACT THAT MAY ARISE AS A RESULT OF THE CONSTRUCTION LIMITED TO CONSTRUCTING SUCH FACILITIES & ANY OTHER MEASURES THAT ARE NECESSARY TO PREVENT CONTROL & ABATE WATER, & EROSION DAMAGE TO PUBLIC & PRIVATE PROPERTY AS A RESULT TO THE CONSTRUCTION OF THIS PROJECT
- 4. EROSION & SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THE INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.
- 5. CONTRACTOR MUST VERIFY THAT ALL DRAINAGE STRUCTURES, WITHIN THE PROJECT LIMITS WHETHER INDICATED ON THE PLANS OR NOT, SHALL BE PROTECTED IN ACCORDANCE WITH THE ESTABLISHED METHODS AS NOTED ABOVE.
- 6. DUST, RESULTING FROM PROPOSED DEMOLITION ACTIVITIES, MUST BE PREVENTED FROM INTRUSION INTO THE STORMWATER CONVEYANCE SYSTEM. APPROPRIATE DUST CONTROL TECHNIQUES (WATER OR SLURRY) MUST BE RETAINED ON SITE. THE USE OF CALCIUM CHLORIDE, OILS OR OTHER CHEMICAL DUST CONTROL AGENTS MUST NOT BE UTILIZED.
- 7. INSTALL PERIMETER POLLUTION PREVENTION CONTROLS AFTER CLEARING & GRUBBING BUT BEFORE BEGINNING OTHER CONSTRUCTION PHASES. REMOVE PERIMETER CONTROLS ONLY AFTER ALL AREAS HAVE BEEN STABILIZED.
- 8. THE EXISTING DRAINAGE FLOW PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
- 9. THE CONTRACTOR SHALL MONITOR ALL POLLUTION CONTROL DEVICES TO ENSURE SUFFICIENT CONVEYANCE OF STORMWATER RUNOFF & TO ELIMINATE SOIL EROSION DURING CONSTRUCTION.
- 10. CONTRACTOR SHALL COVER LOADED TRUCKS WITH TARPAULINS.
- 11. CONTRACTOR SHALL REMOVE EXCESS DIRT FROM ROADS DAILY.
- 12. BUILT UP SEDIMENT WILL BE REMOVED FROM THE STAKED SILT FENCE WHEN IT REACHES ONE-THIRD OF THE FENCE BARRIER OR WHENEVER FLOW IS IMPEDED.
- 13. A QUALIFIED PERSON SHALL INSPECT POLLUTION CONTROL DEVICES AT LEAST ONCE EVERY SEVEN CALENDAR DAYS & WITHIN 24 HOURS OF THE END OF A STORM, THAT IS 0.50 INCHES OR GREATER. TO COMPLY, THE CONTRACTOR SHALL INSTALL & MAINTAIN RAIN GAGES & RECORD THE DAILY RAINFALL. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. THE CONTRACTOR SHALL ALSO VERIFY THAT CONTROLS INSTALLED IN THE FIELD COMPLY WITH THE LATEST STORMWATER POLLUTION PREVENTION PLAN.
- 14. WITHIN 24 HOURS OF INSPECTION, THE CONTRACTOR SHALL INITIATE REPAIRS TO THE CONTROL DEVICES THAT THE INSPECTION INDICATES ARE NOT IN GOOD ORDER.
- 15. SOIL TRACKING PREVENTION DEVICES (STPD'S) ARE REQUIRED. STPD'S SHALL BE CONSTRUCTED AT POINTS WHERE TRAFFIC LEAVES OR ENTER DISTURBED AREAS SUCH AS WORK ZONES STOCKPILE AREAS. CONSTRUCT A STPD PRIOR TO THE ASSOCIATED AREA BEING DISTURBED. CONSTRUCT STPD IN ACCORDANCE WITH FDOT EROSION & SEDIMENT CONTROL MANUAL.
- 16. AT NO TIME SHOULD SEDIMENTS BE ALLOWED TO ACCUMULATE WITHIN DRAINAGE STRUCTURE & CONVEYANCE PIPELINES. STRUCTURES & PIPELINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATIONS SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.

- 17. STOCKPILE OF EARTH & OTHER CONSTRUCTION RELATED MATERIAL MUST BE PROTECTED AGAINST ACCIDENTAL TRANSPORTATION FROM PROJECT SITE BY WIND & WATER FLOW.
- 18. ALL STORM DRAINAGE SYSTEMS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT WATER CANNOT GAIN ENTRY INTO THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHER WISE TREATED TO REMOVE SEDIMENTS.
- 19. MODIFICATIONS OR CHANGES TO THE INFORMATION DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN MUST BE SUBMITTED TO THE EOR/JURIDICTIONS FOR APPROVAL.
- 20. IF ADDITIONAL EROSION & SEDIMENT CONTROL BMP'S ARE REQUESTED BY ANY REGULATORY AGENCY, THE CONTRACTOR MUST PROMPTLY IMPLEMENT SAID MEASURES AFTER APPROVAL OF EOR/JURISDICTIONS.
- 21. THE INSTALLATION OF EROSION & SEDIMENT CONTROL PRACTICES SHALL TAKE PRECEDENCE OVER CONSTRUCTION ACTIVITIES.
- 22. ALL APPLICABLE PERMITS RELATING THE INSTALLATION OF THESE MEASURES MUST BE SECURED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.



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SUB-CONSULTANT:



PROJECT:

DORN AVENUE DRAINAGE IMPROVEMENTS

LOCATION MAP:

REVISIONS:							
NO.	DESCRIPTION	DATE	BY				
DATE ISSUED: SEPTEMBER 6, 2013							
DECICNED BY DD							

DESIGNED BY: RD DRAWN BY: ER REVIEWED BY: ML

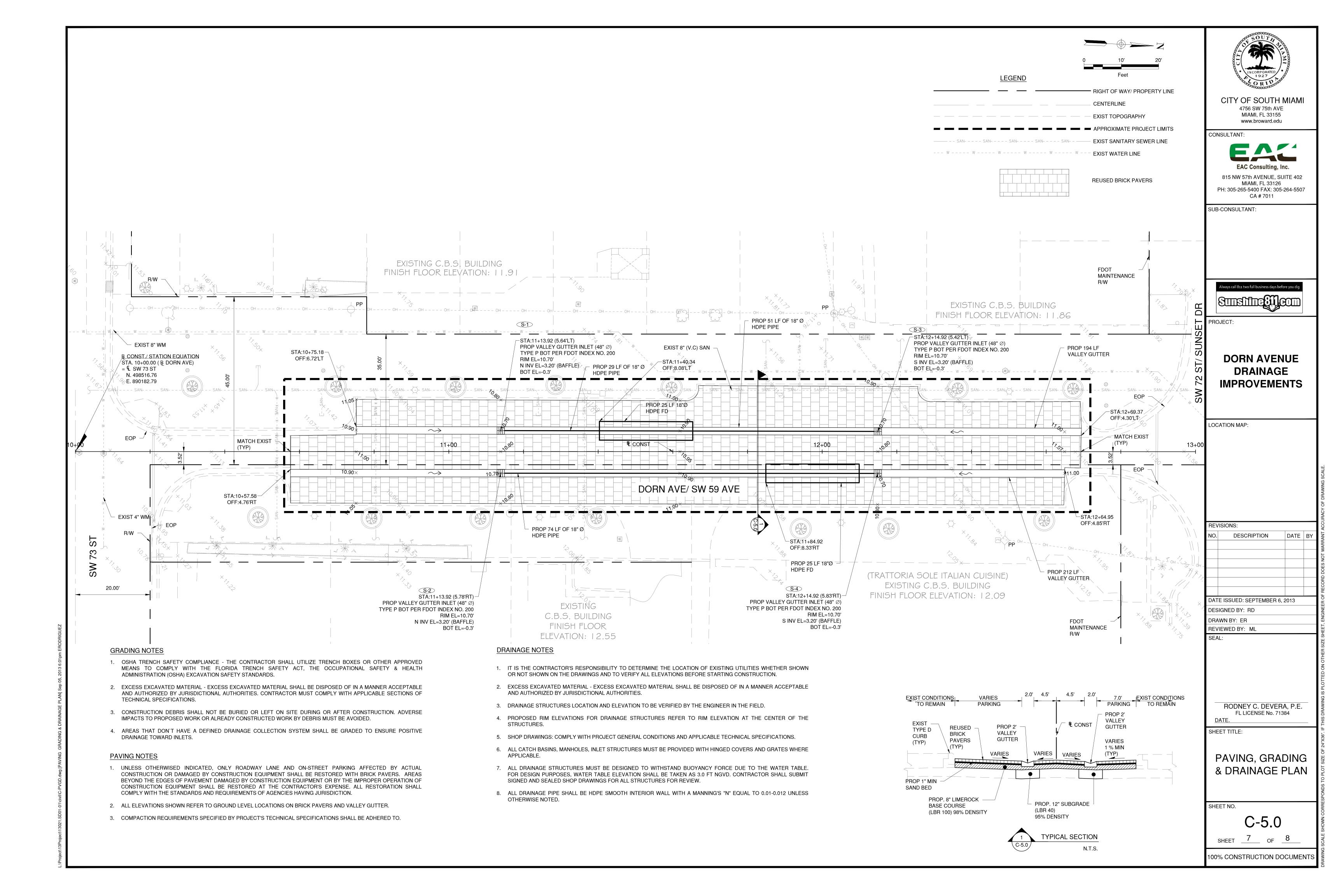
RODNEY C. DEVERA, P.E. FL LICENSE No. 71384

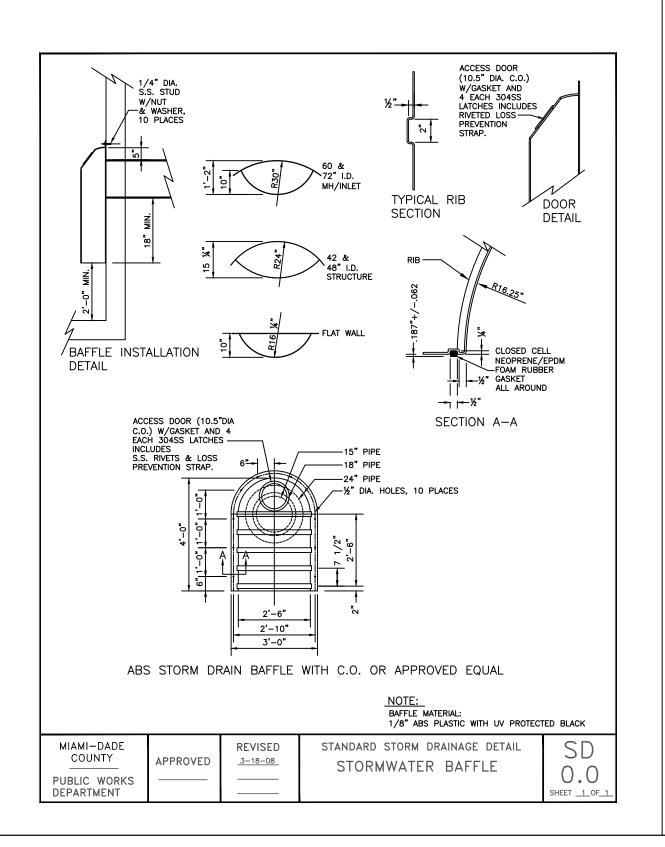
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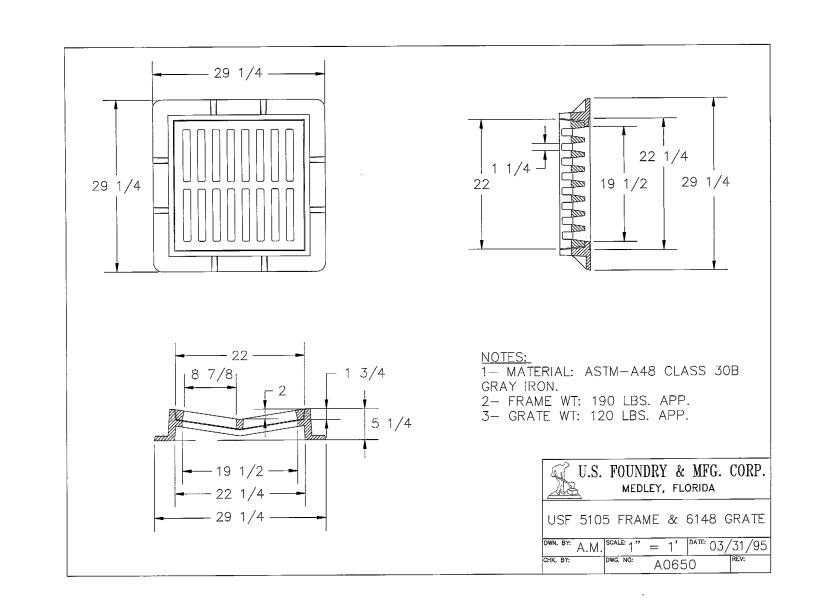
SWPP NOTES & DETAILS

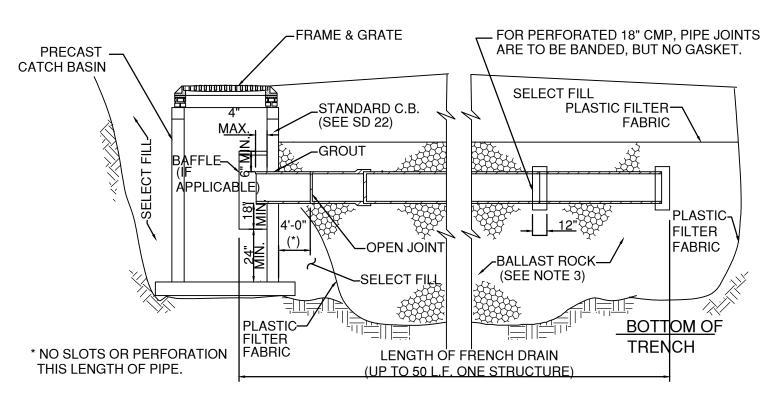
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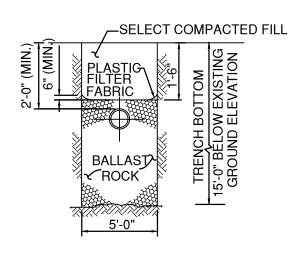
100% CONSTRUCTION DOCUMENTS







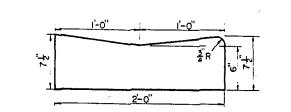




EXFILTRATION TRENCH (TRANSVERSE SECTION) (PER MDPWD STANDARDS)

EXFILTRATION TRENCH (LONGITUDINAL SECTION) (PER MDPWD STANDARDS)

- 1. PLASTIC FILTER FABRIC (AT EA. SIDE) SHALL BE USED IN SANDY AREAS AS NOTED ON PLANS AND/OR AS DIRECTED BY THE ENGINEER.
- 2. THE BOTTOM OF THE EXFILTRATION TRENCH SHALL BE 15'-0" BELOW EXISTING GROUND ELEVATION, UNLESS FIELD CONDITIONS WARRANT OTHERWISE.
- 3. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER IN ORDER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF IT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE BALLAST ROCK TO THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH BE COMPLETED IN ACCORDANCE WITH THE DETAILS
- 4. INVERT ELEVATION TO BE AS SHOWN IN THE PLANS.



2' VALLEY GUTTER

CONCRETE VALLEY GUTTER (PER MDPWD STANDARDS DETAIL R-14.6)



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SUB-CONSULTANT:



PROJECT:

DORN AVENUE DRAINAGE IMPROVEMENTS

LOCATION MAP:

REVISIONS:					
NO.	DESCRIPTION	DATE	В		
DATE ISSUED: SEPTEMBER 6, 2013					

DESIGNED BY: RD

DRAWN BY: ER REVIEWED BY: ML

RODNEY C. DEVERA, P.E. FL LICENSE No. 71384

SHEET TITLE:

PAVING, GRADING & DRAINAGE **DETAILS**

SHEET NO.

C-6.0 SHEET <u>8</u> OF <u>8</u>

100% CONSTRUCTION DOCUMENTS